Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A method of treating an individual suffering from a cancer comprising administering to the individual a therapeutically effective amount of a composition comprising an inhibitor or antagonist of reverse transcriptase encoded by L-1 (LINE-1) retrotransposon in cells of the individual, wherein the inhibitor or antagonist blocks lengthening of telomeres in telomerase negative cells.

2. (Original) The method of claim 1, wherein the inhibitor or antagonist of the reverse transcriptase comprises an antisense sequence, an inorganic compound, an organic compound, a peptide or a small molecule.

3. (Original) The method of claim 1, wherein the antisense sequence is capable of hybridizing with a nucleic acid encoding the reverse transcriptase.

4. (Original) The method of claim 1, wherein the nucleic acid encoding the reverse transcriptase comprises an RNA transcribed from the DNA.

5. (Original) The method of claim 1, wherein the antisense sequence comprises a chimeric RNA-DNA oligonucleotide.

6. (Original) The method of claim 1, wherein the organic compound is a nucleoside analog.

7. (Original) The method of claim 1, wherein the organic compound is a nucleoside

analog, which is 3'-azido-2',3'-dideoxythymidine (AZT), 2',3'-dideoxyinosine (ddI), 2',3'-didehydro-3'-deoxythymidine (d4T) or ganciclovir or a combination thereof.

8. (Original) The method of claim 1, wherein the cancer is osteosarcoma, breast carcinoma, ovarian carcinoma, lung carcinoma, adrenocortical carcinoma or melanoma.

9. (Original) The method of claim 1, wherein the composition is administered orally, parenterally, subcutaneously, intramuscularly, intravascularly or topically.

10. (Original) A method for treating a cancer in a human, wherein the cancer is due to cells showing alternative lengthening of telomeres induced or mediated by L-1 (LINE-1) retrotransposon encoded reverse transcriptase in said cells of the human, the method comprising administering a therapeutically effective amount of a composition comprising one or more nucleoside analogs, or a pharmaceutically acceptable salt thereof, to the human suffering from the cancer.

11. (Original) The method of claim 10, wherein said nucleoside analogs are selected from the group consisting of: 3'-azido-2',3'-dideoxythymidine (AZT), 2',3'-dideoxyinosine (ddI), 2',3'-didehydro-3'-deoxythymidine (d4T) and ganciclovir.

12. (Original) The method of claim 10, wherein the cancer is osteosarcoma, breast carcinoma, ovarian carcinoma, lung carcinoma, adrenocortical carcinoma or melanoma.

13. (Original) The method of claim 10, wherein the composition is administered orally, parenterally, subcutaneously, intramuscularly or intravascularly.

14. (Original) The method of claim 10, wherein a composition comprising two or more said nucleoside analogs are administered.

15. (Original) The method of claim 10, wherein the one of said nucleoside analogs administered is from about 100 mg/kg of body weight to about 500 mg/kg of body weight per day.

16. (Original) A method of interfering with lengthening of telomeres in telomerase negative tumor cells, the method comprising administering to the cells an effective amount of an inhibitor or antagonist of reverse transcriptase encoded by L-1 (LINE-1) retrotransposon in the cells.

17-20 (canceled)

21. (Original) The method of claim 16, wherein the organic compound is a nucleoside analog.

22. (Original) The method of claim 16, wherein the organic compound is a nucleoside analog, which is 3'-azido-2',3'-dideoxythymidine (AZT), 2',3'-dideoxyinosine (ddI), 2',3'-didehydro-3'-deoxythymidine (d4T) or ganciclovir or a combination thereof..

23. (Original) The method of claim 16, wherein the cancer is osteosarcoma, breast carcinoma, ovarian carcinoma, lung carcinoma, adrenocortical carcinoma or melanoma.

24. (Original) A method of preventing or inhibiting the growth of a telomerase negative cell, the method comprising:

contacting the cell with a nucleoside analog; or

transfecting the cell with a construct capable of expressing human L1RT antisense sequence that is substantially or fully complementary to a subsequence of a nucleic acid necessary for encoding L1RT enzyme.

25-61 (canceled)